



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# MA3Z7920G

## Silicon epitaxial planar type

For super high speed switching

For small current rectification

### ■ Features

- High-density mounting is possible
- Forward current (Average)  $I_{F(AV)} = 100$  mA rectification is possible
- Optimum for high frequency rectification because of its short reverse recovery time  $t_{rr}$
- Low forward voltage  $V_F$  and good rectification efficiency

### ■ Package

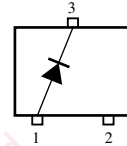
- Code SMini3-F2
- Pin Name
  - 1: Anode
  - 2: N.C.
  - 3: Cathode

### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Reverse voltage	$V_R$	30	V
Repetitive peak reverse voltage	$V_{RRM}$	30	V
Forward current (Average)	$I_{F(AV)}$	100	mA
Peak forward current	$I_{FM}$	300	mA
Non-repetitive peak forward surge current *	$I_{FSM}$	1	A
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$

### ■ Marking Symbol: M3T

### ■ Internal Connection



Note) \*: The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)

### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

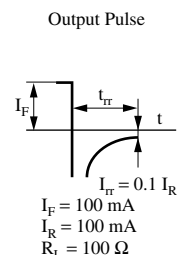
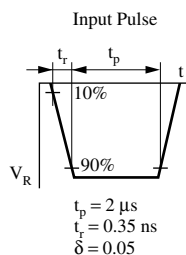
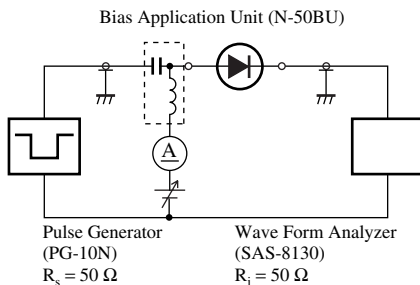
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 100$ mA			0.55	V
Reverse current	$I_R$	$V_R = 30$ V			15	$\mu\text{A}$
Terminal capacitance	$C_t$	$V_R = 0$ V, $f = 1$ MHz		20		pF
Reverse recovery time *	$t_{rr}$	$I_F = I_R = 100$ mA $I_{rr} = 0.1 I_R$ , $R_L = 100 \Omega$		2.0		ns

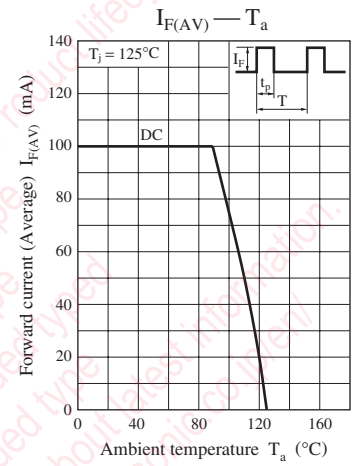
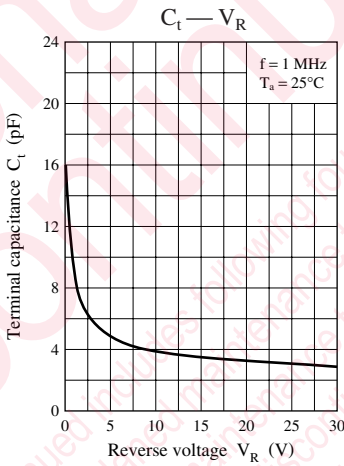
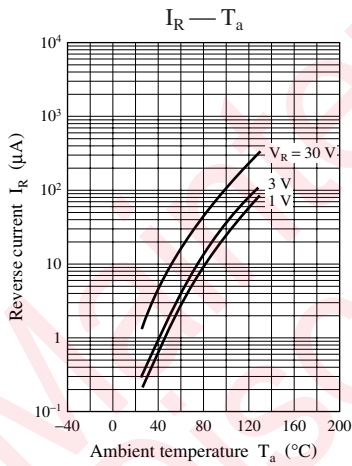
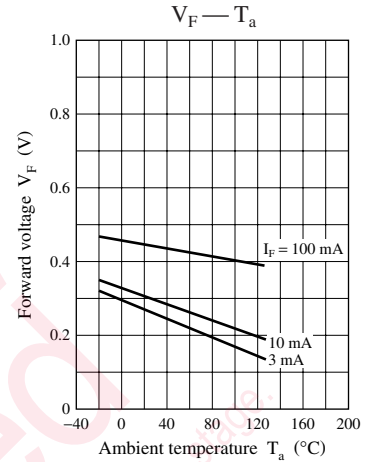
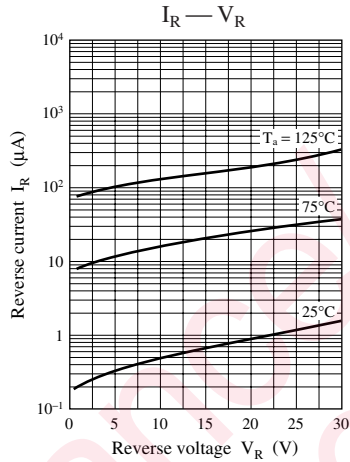
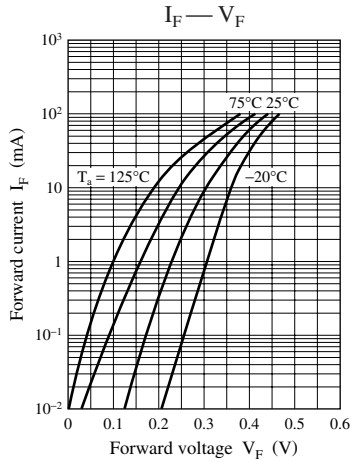
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

3. Absolute frequency of input and output is 250 MHz.

4. \*:  $t_{rr}$  measurement circuit









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